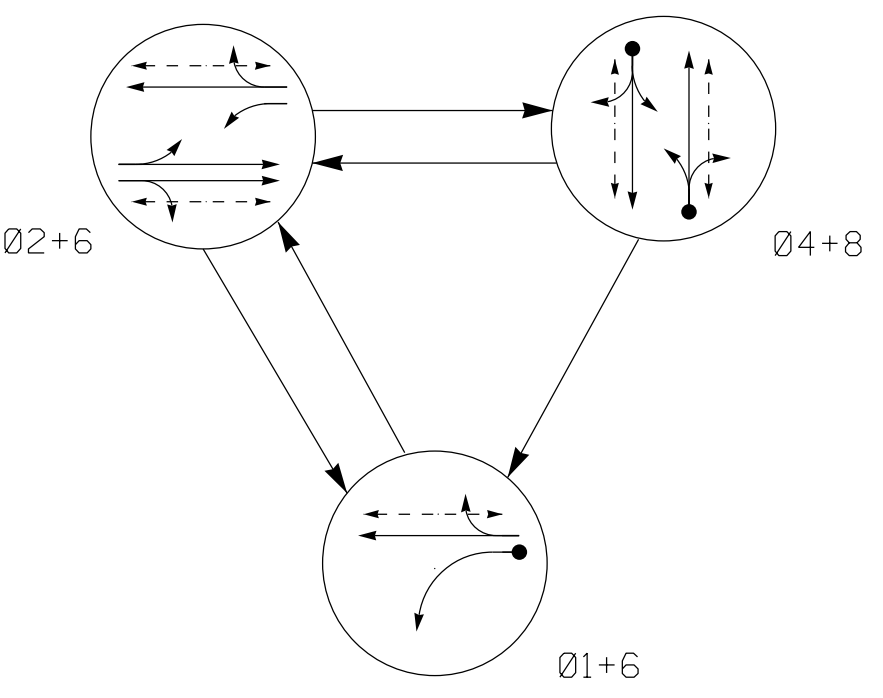


PHASING DIAGRAM



USE RED REVERT FOR PHASE 6

PHASING DIAGRAM DETECTION LEGEND

- ←● DETECTED MOVEMENT
- ← UNDETECTED MOVEMENT (OVERLAP)
- ← UN SIGNALIZED MOVEMENT
- ← PEDESTRIAN MOVEMENT

SIGNAL FACE I.D.

All Heads L.E.D.

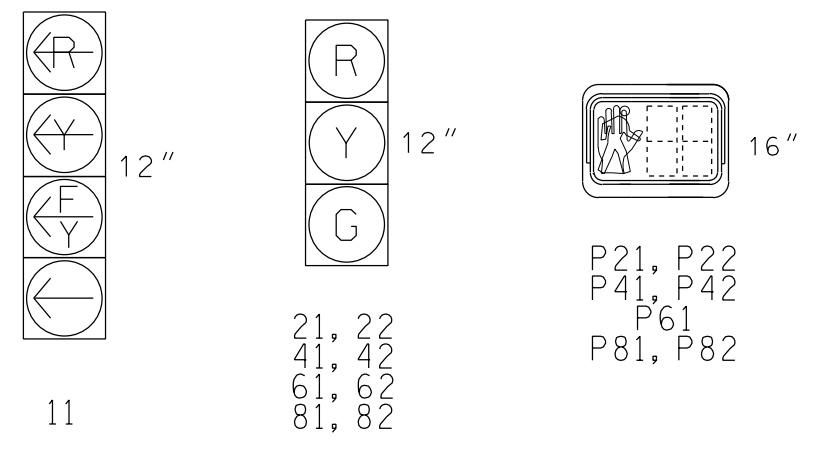


TABLE OF OPERATION

SIGNAL FACE	PHASE			
	01+6	02+6	04+8	FLIGHT
11	←	←	←	←
22, 23	R	G	R	Y
41, 42	R	R	G	R
61, 62	G	G	R	Y
81, 82	R	R	G	R

OASIS 2070 LOOP & DETECTOR INSTALLATION CHART

LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	DETECTOR PROGRAMMING								
				NEW LOOP	PHASE	CALLING	EXTENSION	STRETCH TIME	DELAY TIME	SYSTEM LOOP	NEW CARD	
1A	6x40	+5	2-4-2	-	1	Y	Y	-	-	15	-	Y
4A	6x40	0	2-4-2	-	6	Y	Y	-	-	-	-	Y
8A	6x40	0	2-4-2	-	8	Y	Y	-	-	-	-	Y

3 Phase Semi-Actuated (Asheville Signal System)

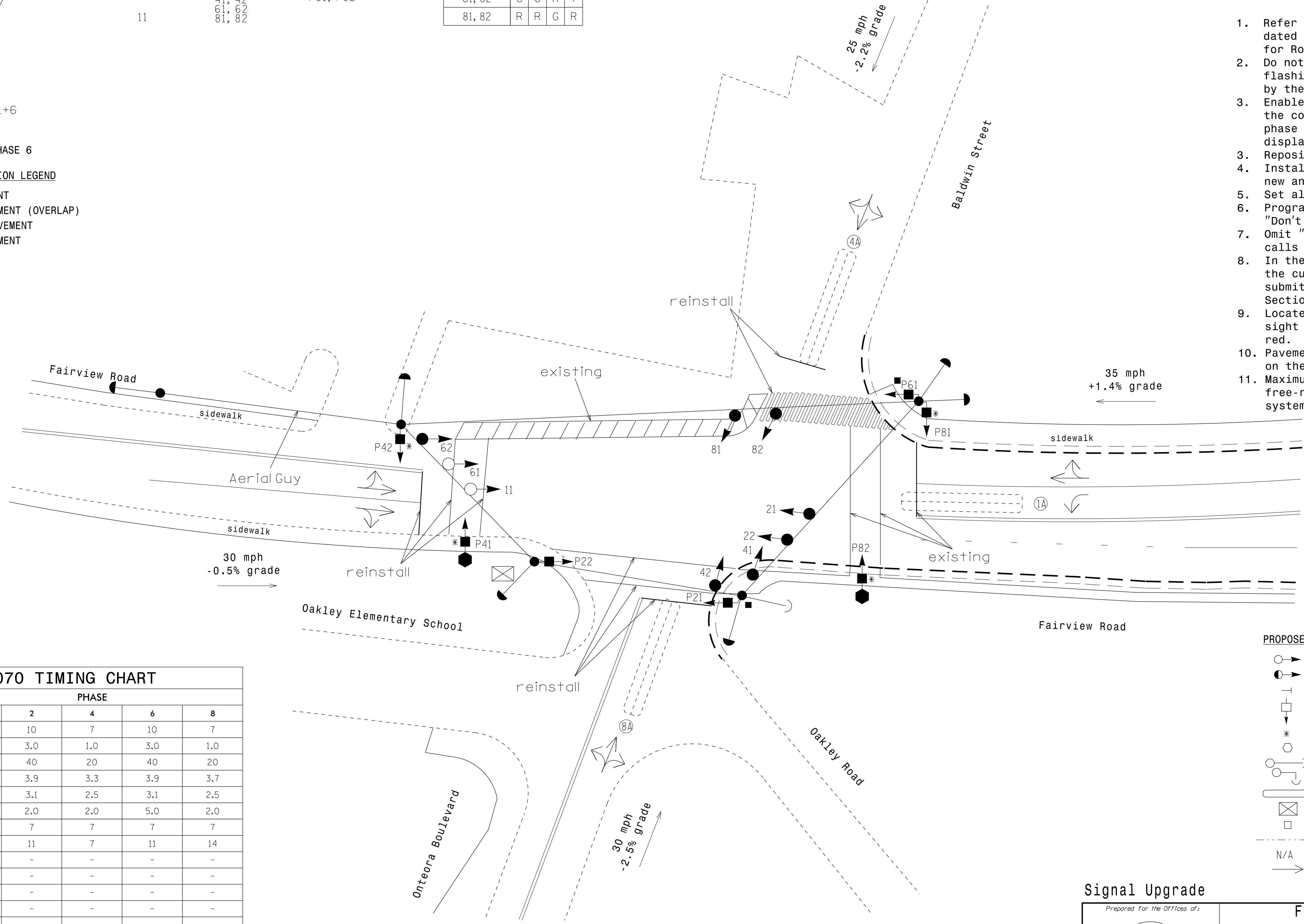
NOTES

1. Refer to "Roadway Standard Drawings NCDOT" dated January 2012 and "Standard Specifications for Roads and Structures" dated January 2012.
2. Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
3. Enable Backup Protect for phase 6 to allow the controller to clear from phase 2+6 to phase 1+6 by progressing through an all red display.
3. Reposition existing signal head 62 as shown.
4. Install new signal cable as necessary for new and repositioned signal heads.
5. Set all detector units to presence mode.
6. Program the pedestrian heads to countdown "Don't Walk" time only.
7. Omit "WALK" and "Don't Walk" for no pedestrian calls for phases 4 and 8.
8. In the event of loop replacement, refer to the current ITS and Signals Design Manual and submit a Plan of Record to the Signal Design Section.
9. Locate new cabinet so as not to obstruct sight distance of vehicles turning right on red.
10. Pavement markings are existing except where noted on the plan.
11. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.

OASIS 2070 TIMING CHART

FEATURE	PHASE				
	1	2	4	6	8
Min Green 1 *	7	10	7	10	7
Extension 1 *	1.0	3.0	1.0	3.0	1.0
Max Green 1 *	15	40	20	40	20
Yellow Clearance	3.0	3.9	3.3	3.9	3.7
Red Clearance	3.2	3.1	2.5	3.1	2.5
Red Revert	2.0	2.0	2.0	5.0	2.0
Walk 1 *	-	7	7	7	7
Don't Walk 1	-	11	7	11	14
Seconds Per Actuation *	-	-	-	-	-
Max Variable Initial *	-	-	-	-	-
Time Before Reduction *	-	-	-	-	-
Time To Reduce *	-	-	-	-	-
Minimum Gap	-	-	-	-	-
Recall Mode **	-	MAX/PED	-	MAX/PED	-
Vehicle Call Memory	-	-	-	-	-
Dual Entry	-	-	ON	-	ON
Simultaneous Gap	ON	ON	ON	ON	ON

* These values may be field adjusted. Do not adjust Min Green and Extension times for phases 2 and 6 lower than what is shown. Min Green for all other phases should not be lower than 4 seconds.
** May be changed to Min Recall by Time of Day at discretion of City Engineer.



LEGEND

PROPOSED	EXISTING
○ → Traffic Signal Head	● → N/A
● → Modified Signal Head	— → Sign
□ → Pedestrian Signal Head	□ → Signal Pedestal
* → Ped Pushbutton & Sign	* → Signal Pedestal
○ → Signal Pole with Guy	● → Signal Pole with Guy
○ → Signal Pole with Sidewalk Guy	● → Signal Pole with Sidewalk Guy
□ → Inductive Loop Detector	□ → Inductive Loop Detector
□ → Controller & Cabinet	□ → Junction Box
□ → 2-in Underground Conduit	□ → Right of Way
→ → Directional Arrow	→ → Directional Arrow

Signal Upgrade

Prepared for the Offices of:

CITY OF ASHEVILLE

Fairview Road at Baldwin Street / Onteora Boulevard

Division 13 Asheville Buncombe County

PLAN DATE: September 2016 REVIEWED BY: MB Toth

PREPARED BY: AM Encarnacion REVIEWED BY:

REVISIONS: INIT. DATE

SCALE: 1"=20'

1616 EAST MILLBROOK ROAD, SUITE 310 RALEIGH, NORTH CAROLINA 27609 (919) 876-6888 NCBEES #F-0326

SEAL NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 025892 MELISSA B. TOOTH

SIG. INVENTORY NO. COA-13

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